

PART I
Initial Discovery/Notification

8. NRC Section notified: USNRC Operations Center

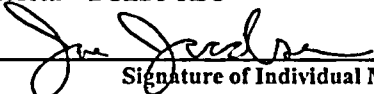
9. Individual's name to which the notification was made: John MacKinnon

10. Time/date notification was made: 10/4/04 1750 hrs.

11. Exact content of notification: Battelle, operating under US NRC License SNM-7 at West Jefferson, Ohio, is notifying NRC of a potential equipment defect as provided from the manufacturer concerning the MSA Model MM2K PAPR motor/blower assembly (Part # 10022695). After limited field use at its West Jefferson, Ohio site, noticeable cracks/fissures developed on some of the motor/blower casings. The manufacturer of the equipment, MSA, has been notified of the problem and several of the cracked/fissure units have been returned to MSA for testing in early September. Battelle discontinued use of the MSA Model MM2K PAPR in mid September as a result of the observed equipment cracks/fissures at its West Jefferson, Ohio site.

12. Was any other agency or individual contacted as a result of this event? X Yes No; If yes, who was contacted?
Pete Greenwalt- DOE Columbus Closure Project Manager

13. Initial notification made by: Joe Jacobsen- BCLDP RSO


Signature of Individual Making Notification

Joe Jacobsen- BCLDP RSO

Acknowledged (RSO)

**BATTELLE COLUMBUS LABORATORIES
USNRC
EVENT REPORT**

**PART II
Event Evaluation**

- 1. Describe what conditions existed at the facility at the time of the event:**
Routine radiological facility decommissioning operations.

- 2. Describe any facilities alarms or equipment that indicated the event:**
None

- 3. Radiological conditions involved with the event: N/A**
- ☐ Overexposure of licensee personnel
 - ☐ Overexposure of a member of the general public, a minor, or a prenatal exposure
 - ☐ Release of radioactive materials to the environment
 - ☐ License condition
 - ☐ Loss or theft of radioactive materials
 - ☐ Dose limits in restricted or unrestricted areas exceeded
 - ☐ Receipt or transportation of radioactive materials
 - ☐ Equipment failure
 - ☐ Fires, toxic gasses, etc. that prevent radiological responses
 - ☐ Contamination events
 - ☐ Unplanned medical treatment of a contaminated individual at an offsite facility
 - ☐ Sealed source leak tests
 - ☐ Special nuclear material
 - ☐ EPA limits

- 3. Describe, in detail, including the isotopes, quantities, and physical and chemical forms, radiation levels, radioactive material concentrations, causes of elevated levels of exposure rates, dose or concentrations, of the event:**
This section is not applicable to this event as it is an informational reporting for a 10CFR21 potential equipment defect issue only.

PART II
Event Evaluation

4. Describe, in detail, immediate and supplemental corrective actions taken to mitigate the event and ensure against recurrence:

We have discontinued the use on site of the MSA brand MM2K PAPR. We have also added the MSA brand MM2K PAPR on the list of items not to be purchased on this site with the Quality Assurance Department.

5. Describe any release that has, is or will occur as a result of this event:
None

PART II
Event Evaluation

7. If overexposures of facility personnel or members of the general public are involved, including prenatal over exposure, complete Part III of this form. N/A



SECTION 1.

[illegible]

**** M = male; F = female; P = pregnant female, Mr = minor; G = General Public**

**BATTELLE COLUMBUS LABORATORIES
USNRC
EVENT REPORT**

**PART III
Exposure Data**

SECTION 2.

Summary of supplemental actions taken associated with exposures:

None

**BATTELLE COLUMBUS LABORATORIES
USNRC
EVENT REPORT**

**PART IV
Final Event Summary**

1. Determined cause of the event

- ☐ Design
- ☐ Procurement
- ☐ Component Failure
- ☐ Failure to Comply
- ☐ Personnel Performance Failure
- ☐ Installation/Construction Errors
- ☐ Unusual Service Condition
- ☐ Procedure Deficiency
- ☐ Administrative Deficiency

NOTE: Use Exhibit 1 as guidance in determining the cause of the event

2. Summarize, in detail, the cause, sequence of events and effects of the event.

The cause of this event is a possible inadequate design of the MSA brand MM2K PAPR motor/blower assembly casing for the type of work we are performing on site. The MSA brand MM2K PAPR was procured in the summer of 2004 to be an alternative to existing site PAPRs for the purposes of its lighter weight and ability to provide greater mobility and ease of motion for the workers while wearing the respirator during work activities. Our original note of the problem with cracking/fissures of some of our MSA brand MM2K PAPRs motor/blower casings occurred on August 25, 2004 during routine inspection processes on site. Subsequently, we observed more cracking on the motor/blower casings of other units on site and involved MSA representatives with the issue both on site as well as by returning defective blower/motor assemblies to their factory for evaluation. In mid September we discontinued use of the MSA brand MM2K PAPR motor/blower assembly on site per a site management decision. We did not have any personnel exposures issues on site as a result of the cracking of this motor/blower assembly.

The effect of the noted issue with the motor/blower assembly has been that we have lost the use of this style of respirator on site which afforded a lighter weight and more worker friendly option for use for different field work evolutions. Site management's decision to discontinue use of this style of respirator on site was based on not wanting to take the risk of a motor/blower assembly unit failing while in use and allowing a worker(s) to receive an intake of radioactive material.

PART IV
Final Event Summary

6. Date this report sent 10/31-04

7. Report sent to: 1) US NRC, Document Control Desk, Washington, D.C. 20555
2) Administrator, USNRC, Region III, 2443 Warren Road, Suite 201, Lisle, IL, 60532-4352

8. Copies of this report sent to:

1. Mike McCann- Region III NRC-Senior Health Physicist
2. BCLDP RSO File
3. Pete Greenwalt-DOE Site Manager-Columbus Closure Project
4. Scott Zoller- Closure Services Site RSO
5. Pat Weaver- Battelle BCLDP Oversight Manager
6. BSTI RSO File
- 6.
- 7.
- 8.
- 9.
- 10.

Report Preparer:


Joe Jacobsen- BCLDP RSO

Date: 10/29/04

Report Approval:


Pat Weaver- BMI BCLDP Project Manager

Date: 10/29/04